



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Pellerin, et al.

Serial No.: 10/723,098

Examiner: Christopher M. Koehler

Filed: November 26, 2003

Group Art Unit: 3726

Title: **ADJUSTABLE WORKPIECE SUPPORT ASSEMBLY
FOR CONVEYORS**

Atty. Docket No.: 60,568-021

AMENDMENT

Mail Stop Amendment - Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

In response to the Office Action mailed November 4, 2005, Applicant wishes to amend the application as follows. A version of the specification and pending claims are presented having necessary markings to show the changes made and the current status of all pending claims in compliance with 37 C.F.R. §1.121.

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 4 of this paper.

Remarks/Arguments begin on page 11 of this paper

IN THE SPECIFICATION

Please revise paragraph [0011] beginning on page 3 as follows:

[0011] A contemporary automotive assembly line for mounting tires with respective wheels includes a pair of conveyors designed for supporting and transferring the tires and wheels, respectively, which are received from tire and wheel supplying sources, i.e. stations at the assembly plant. The wheels and tires are transferred by the first and second conveyors to an assembly for mating the tire with the wheel. The assembly includes a device for supporting the wheel having spaced seats extending around a vertical axis. A tire support for supporting the tire having spaced beads on the wheel with one bead looped between the seats ~~[[an]]~~ and outside the seats is adjacent the device for supporting the wheel. The assembly includes a tool for forming the seats over the bead with the entire bead disposed between the seats. A tire support of the present invention includes a tread support for engaging the tread of the tire. A side support for engaging the side of the tire is connected to the tread support. The tire support is adjustably supported on the tread support.

Please revise paragraph [0023] beginning on page 8 as follows:

[0023] The arms 70, 72 may move vertically and horizontally along the plates 50, 52. With respect to different operational modes of the present invention, the arms 70, 72 are movable upwardly from and downwardly to the second plate 16 to present the seat 94 of various angles defined between the inclined surface of the plates 50, 52 and the terminal ends 74, 78 of the arms 70, 72. This allows for the ~~[[for the]]~~ positioning of the tire T upon the respective wheel R prior to mounting the tire T and wheel R together at the assembly line. In addition, the first terminal ends 74, 78 of the arms 70, 72 are movable upwardly and downwardly with respect to the vertical axis B. Desirable alignment of the tire T to the respective wheel R is provided by an angle of the seat 94 defined between the first ends 74, 78 of the arms 70, 72 and the inclined surfaces 62, 64 of each plate 50, 52 of the tread support

18. As appreciated by those skilled in the art, a plurality of wheels **R** having different diameters may be positioned within and on the circular plate **24**. To provide a desirable alignment between the tire **T** and the wheel **R**, the arms **70, 72** are pre-positioned relative to the slots **66, 68** to provide a seat **94** capable of aligning various sized tires **T** and wheels **R** in a desirable relationship.

IN THE CLAIMS:

Please amend the claims as follows:

1. (Original) An assembly for orienting a tire on a wheel in a position compatible with a tool capable of mating the tire with the wheel, comprising:

a device for supporting a wheel having spaced seats extending around a vertical axis;

a tire support for supporting a tire having spaced beads on the wheel with one bead looped between the seats and outside the seats;

said tire support including a tread support for engaging the tread of the tire and a side support for engaging the side of the tire; and

said tire support of said assembly characterized by said side support being adjustably supported on said tread support.

2. (Original) An assembly for mating a tire with a wheel as set forth in Claim 1, wherein said tread support includes connectors for adjusting said tread support horizontally to and away from said vertical axis on said tire support.

3. (Original) An assembly for mating a tire with a wheel as set forth in Claim 2, wherein said tread support is defined by a pair of walls.

4. (Original) An assembly for mating a tire with a wheel as set forth in Claim 3, wherein said wall presents top and bottom ends interconnected by inclined sides.

5. (Original) An assembly for mating a tire with a wheel as set forth in Claim 4, wherein said wall includes a first female connector.

6. (Original) An assembly for mating a tire with a wheel as set forth in Claim 5, wherein said first female connector is further defined by a pair of slots.

7. (Original) An assembly for mating a tire with a wheel as set forth in Claim 6, wherein said slots are spaced one from the other and defined between said top and bottom ends of said wall.

8. (Original) An assembly for mating a tire with a wheel as set forth in Claim 7, wherein side support is defined by a pair of arms having terminal ends, respectively.

9. (Original) An assembly for mating a tire with a wheel as set forth in Claim 8, wherein said arm includes a second female connector defined between said terminal ends of said arm.

10. (Original) An assembly for mating a tire with a wheel as set forth in Claim 9, wherein said second female connector is defined by an elongated opening.

11. (Currently Amended) An assembly for mating a tire with a wheel as set forth in Claim 10, wherein said first female connector of said arm is positioned perpendicularly and adjustably with respect to said second female connector of said wall.

12. (Original) An assembly for mating a tire with a wheel as set forth in Claim 11, including a male connector extending between said female connectors of said wall and said arm to interconnect said arm with said wall.

13. (Original) An assembly for mating a tire with a wheel as set forth in Claim 12, wherein said male connectors is defined by a pair of bolts.

14. (Original) An assembly for mating a tire with a wheel comprising:

a conveyance device for supporting the tire and the wheel thereon and presenting a longitudinal axis;

a first surface connected to said conveyance device for supporting the wheel of a predetermined configuration and presenting a vertical axis for engaging the wheel around said vertical axis;

a second surface connected to said conveyance device for supporting a tire having a configuration complementary to the predetermined configuration of the wheel;

first and second supporting elements for supporting and positioning the tire with respect to the wheel; and

said second supporting element adjustably secured with said first element presenting a supporting axis diverging with respect to said longitudinal and said vertical axis to present a seat having a predetermined configuration complementary to the configuration of the tire for positioning thereby tire with respect to the wheel.

15. (Original) An assembly for mating a tire with a wheel as set forth in Claim 14, wherein said first supporting element includes connectors for adjusting said first supporting element horizontally to and away from said vertical axis on said second surface.

16. (Original) An assembly for mating a tire with a wheel as set forth in Claim 15, wherein said first supporting element is defined by a pair of walls.

17. (Original) An assembly for mating a tire with a wheel as set forth in Claim 16, wherein said wall presents top and bottom ends interconnected by inclined sides.

18. (Original) An assembly for mating a tire with a wheel as set forth in Claim 17, wherein said wall includes a first female connector.

19. (Original) An assembly for mating a tire with a wheel as set forth in Claim 18, wherein said first female connector is further defined by a pair of slots.

20. (Original) An assembly for mating a tire with a wheel as set forth in Claim 19, wherein said slots are spaced one from the other and defined between said top and bottom ends of said wall.

21. (Original) An assembly for mating a tire with a wheel as set forth in Claim 20, wherein second supporting element is defined by a pair of arms having terminal ends, respectively.

22. (Original) An assembly for mating a tire with a wheel as set forth in Claim 21, wherein said arm includes a second female connector defined between said terminal ends of said arm.

23. (Original) An assembly for mating a tire with a wheel as set forth in Claim 22, wherein said second female connector is defined by an elongated opening.

24. (Currently Amended) An assembly for mating a tire with a wheel as set forth in Claim 23, wherein said first female connector of said arm is positioned perpendicularly and adjustably with respect to said second female connector of said wall.

25. (Original) An assembly for mating a tire with a wheel as set forth in Claim 24, including a male connector extending between said female connectors of said wall and said arm to interconnect said arm with said wall.

26. (Original) An assembly for mating a tire with a wheel as set forth in Claim 25, wherein said male connectors is defined by a pair of fasteners.

27. (Original) An assembly for supporting a tire upon a wheel in a position suitable for mating the tire to the wheel, comprising:

a first supporting element defining first and second slots; and

a second supporting element defining a third slot interconnected with each of said first and second slots by male fasteners thereby providing varying degrees of orientation between said first and second supporting elements for providing a seat having a desirable orientation for supporting the tire against the wheel.

28. (Original) An assembly for supporting a tire upon a wheel in a position suitable for mating the tire to the wheel, as set forth in Claim 27, wherein said first slot is further defined by said first supporting element including an elongated slot of a generally vertical orientation defined in said first supporting element.

29. (Original) An assembly for supporting a tire upon a wheel in a position suitable for mating the tire to the wheel, as set forth in Claim 28, wherein said second slot is further defined by said first supporting element including another elongated slot of a generally vertical orientation defined in said first supporting element and spaced from said first elongated slot.

30. (Original) An assembly for mating a tire with a wheel as set forth in Claim 29, wherein said third slot is further defined by said second supporting element including an elongated slot defined therein and oriented transversely with respect to said first and second elongated slots.

31. (Original) An assembly for mating a tire with a wheel as set forth in Claim 30, wherein said second supporting element being movable horizontally about said fasteners and with respect to said vertical axis.

32. (Original) An assembly for mating a tire with a wheel as set forth in Claim 31, wherein said second supporting element being pivotably movable with respect to said longitudinal axis thereby diverging to and from said longitudinal axis.

33. (Original) An assembly for mating a tire with a wheel as set forth in Claim 32, wherein said second supporting element being movable in a vertical direction about said first and second elongated slots presenting a surface planar with said longitudinal axis.

34. (Original) An assembly for mating a tire with a wheel as set forth in Claim 33, wherein said second supporting element is defined by a pair of arms adjustable secures with the respective walls.

35. (Original) An assembly for mating a tire with a wheel as set forth in Claim 34, wherein said first supporting element is defined by a pair of wall spaced from one the other.



REMARKS

Applicant thanks the Examiner for allowing claims 1 through 35. As suggested by the Examiner, Applicant has corrected paragraph [0011] beginning on page 3 and paragraph [0023] beginning on page 8. In addition, the Applicant has amended claims 11 and 24 to render the Examiner's objection of otherwise allowable claims 11 and 24 moot.

Although it is believed that no fee is due for the filing of this Amendment, the Commissioner is authorized to charge our Deposit Account No. 08-2789 for any additional fees or credit the account for any overpayments regarding this Amendment. Further and favorable reconsideration of the outstanding Office Action is hereby requested.

Respectfully submitted,

HOWARD & HOWARD ATTORNEYS, P.C.

Gregory D. DeGrazia, Reg. 48,944
The Pinehurst Office Center, Suite 101
39400 Woodward Avenue
Bloomfield Hills, Michigan 48304-5151
Telephone: (248) 723-0325

Dated: February 6, 2006

CERTIFICATE OF MAILING

I hereby certify that this **Amendment** for United States Patent Application Serial Number **10/723,098** filed **November 26, 2003** is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on **February 6, 2006**.

Anne Kubit